

REMARKS

In accordance with the foregoing, the drawings and claims 4, 10 and 17 have been amended. Claims 1-3, 5-9, 11-16, 18-31 have been cancelled and claims 32-49 have been added. Thus, claims 4, 10, 17 and 32-49 are now pending and under consideration.

The 35 U.S.C. §112, First Paragraph Rejection:

At page 2 of the Office Action, claims 1, 4, 9-10, 15, 17 and 24 are rejected under 35 U.S.C. §112, first paragraph as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Specifically, the Examiner objects to the use of the term *stereoscopic* which is found only in the preamble of each claim. The visual effect created by projecting two images onto separate spaces as disclosed in the application is indeed similar to an effect provided by a stereoscopic device. Since the term *stereoscopic* is not necessary to describe the invention as recited in the body of the respective claims, each of the rejected claims has been amended to refer to the device as a display device. It is respectfully requested that this rejection be withdrawn.

The Examiner also asserts that the specification and the claims also fail to teach how a second beam splitter is capable of projecting the images from the two image sources to different space or locations. Claims 1, 9, 15 and 24 have been cancelled, thus the rejection of claims 1, 9, 15 and 24 is moot. Claims 4, 10 and 17 have been amended to more particularly describe the invention as disclosed in the embodiment shown in FIG. 2A of the application (now FIG. 2B). It is respectfully submitted that the Examiner's objection is overcome by the amendment.

Regarding original claim 9, features of which have been incorporated in amended claim 10, the Examiner asserts that the "specification only teaches use [of] different image sources to display a first and second image but not the same image source." In this regard, the Examiner's attention is directed to paragraph [0018] of the specification and particularly to the portion of paragraph [0018] found at the first three lines of page 5 of the specification. Therein, the specification describes that the invention includes "one or more image sources." A disclosure of forming multiple images with one source is clearly contemplated by the specification as disclosed in the above portion of the specification and in the original claims. It is respectfully requested that this rejection be withdrawn.

Claim Objections:

The Examiner has objected to claim 17. Although the description as claimed in claim 17 is clearly supported by the specification, the Examiner's suggestion for describing the invention has been adopted for claiming the invention as claimed in claim 17, recognizing that a "V" is customarily formed by elements having one acute angle and an "N" is formed by elements having two acute angles. The Examiner asserts that the specification fails to teach how the first and second image generated by the same image source is capable of being modulated by the first and second beam splitters differently as described in claim 10. Claim 10 does not use the term modulated. Claim 10 has been amended and in the process the Examiner's objection may have been overcome. The Examiner is respectfully requested to withdraw the objection in view of the amendment of claim 10 or to more clearly state the objection in terms of the claim language.

The 35 U.S.C. §103(a) Rejection

At page 4 of the Office Action, claims 1, 4, 9, 10, 15, 17 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,782,547 to Machtig et al. in view of Japanese Patent, JP411326822A to Hiroshi. Claims 1, 9, 15 and 24 have been cancelled without prejudice or disclaimer, thus the rejection of claims 1, 9, 15 and 24 is moot. Claims 4, 10 and 17 have been amended to more clearly point out the features of the embodiment of the elected species. In the rejection, the Examiner asserts that reference 102 of Fig. 10 of Machtig et al. is a first beam splitter. However, the specification of Machtig et al. describes reference 102 as a surface mirror. Nothing in Machtig et al. attributes any beam splitting properties to the surface mirror 102. Claim 4, as amended, recites "a first beam splitter which transmits a portion of the first image and reflects another portion of the first image," and "a holographic optical element comprising an aspherical lens function and which reflects the transmitted portion of the first image back onto the first beam splitter which further reflects the transmitted portion of the first image." Thus, claim 4 clearly distinguishes over FIG. 10 of Machtig et al. Claim 10, as amended, recites "a first beam splitter which transmits a portion of the first image and reflects another portion of the first image" and "a holographic optical element comprising an aspherical lens function and which reflects the transmitted portion of the first image back onto the beam splitter which further reflects the transmitted portion of the first image." Thus, claim 10 clearly distinguishes over FIG. 10 of Machtig et al. Claim 17, as amended, recites "the first image source and the first beam splitter are arranged at a first acute angle and the reflective

holographic optical element and the first beam splitter are arranged at a second acute angle." This combination of features is not disclosed in Machtig et al.

The Examiner admits that Machtig et al. does not teach how to include a holographic element and the holographic element has an aspherical lens function. Although the Examiner has presented a reference which discloses a reflective holographic optical element, referring to 10 of FIG. 7 and the Abstract of Hiroshi, the Examiner has not presented any technical analysis concerning which elements of Machtig et al. would be removed and how such elements would be replaced by the elements of Hiroshi in order to arrive at the invention as claimed. Further, the Examiner's conclusion that Hiroshi and Machtig et al. are in the same field of endeavor is unsupported by the references. The present invention and Machtig et al. relate to presenting plural images onto separate spaces, whereas Hiroshi relates to presenting a single image onto a pupil of an observer and the portions referred to by the Examiner are related to correcting optical aberrations in the single image.

New claims:

New claims 32-49 recite additional features of the invention which are applicable to the embodiment shown in FIG. 2B (previously FIG. 2A). The prior art does not disclose a display device wherein each beam splitter is a holographic optical element, as recited in claims 32, 33 and 34. Claims 35, 36 and 37 are deemed to be patentable at least for similar reasons set forth above regarding claims 4, 10 and 17, respectively. The prior art does not disclose a display device wherein the foreground image is smaller in size as recited in claims 38, 39 and 40, respectively or that the foreground image is brighter than the image transmitted onto the first space, as recited in claims 41, 42 and 43. Claims 44-46 are deemed to be patentable at least for similar reasons set forth above regarding claims 4, 10 and 17, respectively. Claims 47-49 are deemed to be patentable at least for similar reasons set forth above regarding claims 4, 10 and 17, respectively.

Conclusion:

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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